UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,751	04/21/2004	Chuck Price	P00924-US-01 (06579.9374)	5494

22446 7590 01/03/2006

ICE MILLER
ONE AMERICAN SQUARE
BOX 82001
INDIANAPOLIS, IN 46282-0200

EXAMINER	
NORTON, JENNIFER L	
ART UNIT	**PAPER NUMBER**
2121	

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/828,751	PRICE ET AL.	
	Examiner	Art Unit	
	Jennifer L. Norton	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 September 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9/1/04
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-28 are pending.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, element 89 - "Product Code Button" in Fig. 3; element 440 - "dropdown menus", element 89 - "Hide/Show Product" and element 96 - "Scroll Buttons" in Fig. 6; element 180 - "Window" in Fig. 9; element 254 – "scrolling buttons"; and element 304 - "Knife Manuel Data Entry" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

In reference to specifications filed on April 21, 2004:

- wallboard is misspelled on pg. 20, lines 11 and 13 as "wall board"

Appropriate correction is required.

In reference to the amended specifications filed on September 1, 2004:

- Pg. 9, lines 1 and 5 includes the abbreviation "ADC" which is not defined and rendered unclear. All abbreviation should be defined to avoid ambiguity.
- Pg. 16, lines 6-7 improperly references the "top level screen" as 25.
- Pg. 22, line 9 improperly references the "a Mill Manual Data Entry screen" as 201.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 5-11 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No.: 6,421,571 (hereinafter Spriggs).

6. As per claim 1, Spriggs discloses a method of monitoring a manufacturing sub-process, the method comprising the steps of:

a) providing a KPI platform (Fig. 1, element 100) with a SPC subsystem (col. 1, lines 6-10, col. 5, lines 62-65 and Fig. 1, element 20);

b) collecting and storing at least one piece of data in at least one database (Fig. 1, element 82) through at least one data collecting apparatus (col. 2, lines 44-48, col. 5, lines 66-67, col. 6, lines 1-4 and 11-13 and Fig. 1, element 60);

c) setting at least one range of specifications for the at least one piece of data on the KPI dashboard (col. 26, lines 7-11, col.10, lines 12-17 and col. 22, lines 13-16);

d) accessing the single database with the KPI dashboard (col. 25, lines 45-48); and

e) notifying at least one user through the SPC subsystem in real time when the at least one piece of data falls outside the at least one range of specifications (col. 5, lines 66-67, col. 6, lines 1-4 and col. 10, lines 1-2 and 22-26).

7. As per claim 2, Spriggs discloses the collecting and storing at least one piece of data step comprises automatically collecting (Fig. 1, element 60) and storing (Fig. 1, element 82) a first piece of data in the at least one database (col. 6, lines 11-13) and

manually collecting and storing a second piece of data in the same at least one database (col. 2, lines 44-48, col. 5, lines 66-67, col. 6, lines 1-4 and 11-13, col. 21, lines 41-46 and 64-67).

8. As per claim 5, Spriggs discloses the collecting and storing at least one piece of data step collects and stores at least one measure specific to the at least one selected manufacturing sub-process (col. 2, lines 44-52).

9. As per claim 6, Spriggs discloses the setting at least one range of specifications step comprises setting at least one range of specifications for the at least one measure (col. 26, lines 7-11).

10. As per claim 7, Spriggs discloses the step of setting at least one alarm within the range of specifications for the selected manufacturing sub-process (col. 10, lines 1-2 and 22-26).

11. As per claim 8, Spriggs discloses the step of notifying the user in real time when the at least one collected measure triggers the alarm (col. 5, lines 66-67 and col. 6, lines 1-4).

12. As per claim 9, Spriggs discloses the step of entering into the at least one database a reason for the collected measure triggering the alarm (col. 20, lines 66-67 and col. 21, lines 1-5 and 41-46).

13. As per claim 10, Spriggs discloses the step of entering a corrective action in the at least one database that was taken to prevent the at least one measure from triggering the alarm again (col. 20, lines 66-67 and col. 21, lines 1-5 and 41-46).

14. As per claim 11, Spriggs discloses the step of generating at least one report based on the at least one piece of data stored in the at least one database (col. 28, lines 4-6).

15. As per claim 26, Spriggs discloses a plant management system comprising:

a) at least one piece of manufacturing equipment (col. 2, lines 12-17);

b) a means for gathering at least one piece of process data from the manufacturing equipment (Fig, 1, element 60 and col. 6, lines 11-13);

c) a means for storing the at least one piece of process data in at least one database (Fig. 1, element 82 and col. 6, lines 11-13);

d) a means for manually entering at least one piece of product data into the same at least one database (col. 2, lines 44-48, col. 5, lines 66-67, col. 6, lines 1-4 and 11-13, col. 21, lines 41-46 and 64-67); and

e) a means for allowing a user to access the product and process data to generate at least one report (col. 28, lines 4-6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claims 3-4, 13-25 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No.: 6421,571 (hereinafter Spriggs) in view of U.S. Patent No.: 6,834,370 (hereinafter Brandl).

17. As per claim 3, Spriggs as set forth above, discloses a method substantially the same as claimed, but does not expressly teach the step of storing at least one piece of product identifying data and at least one piece of manufacturing plant specific data together in the at least one database.

Brandl teaches to the step of storing at least one piece of product identifying data and at least one piece of manufacturing plant specific data together in the at least one database (col. 28, lines 4-7).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to include the step of storing at least one piece of product identifying data and at least one piece of manufacturing plant specific data together in the at least one database to reduce the number of computers and operating systems required for protecting and managing plant equipment. Hence, capital costs are lowered and the traditional requirement for both expertise and human resources necessary to integrate and maintain is reduced (Spriggs: col. 1, lines 67 and col. 2, lines 1-5).

18. As per claim 4, Spriggs as set forth above, discloses a method substantially the same as claimed, but does not expressly teach the step of allowing the user to select at least one manufacturing sub-process through the KPI dashboard.

Brandl teaches to the step of allowing the user to select at least one manufacturing sub-process through the KPI dashboard (col. 48, lines 57-61, col. 18-22 and 55-61 and Figs. 70, 72, and 74).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to include the step of allowing the user to select at least one manufacturing sub-process through the KPI dashboard to edit and configure properties for each for process (Brandl: col. 48, lines 25-28)

19. As per claim 12, Spriggs discloses (c) assigning at least one data collecting apparatus to at least one manufacturing sub-process that produces the at least one product (col. 2, lines 44-48; it is inherent that a plant produces some product which includes services or tangible item) and (d) collecting at least one piece of process data with the at least one collecting data apparatus (col. 2, lines 44-48).

Spriggs does not expressly teach (a) entering at least one piece of product identifying data for at least one product into a first data entry field, (b) entering at least one piece of manufacturing plant specific data into a second data entry field and (e) storing the product identifying data, the plant specific data and the process data together in at least one database.

Brandl teaches a method of monitoring at least one manufacturing process for at least one manufacturing plant, the method comprising the steps of:

a) entering at least one piece of product identifying data for at least one product into a first data entry field (Fig. 66, and col. 48, lines 36-40);

b) entering at least one piece of manufacturing plant specific data into a second data entry field (col. 48, lines 24-34);

e) storing the product identifying data, the plant specific data and the process data together in at least one database (col. 28, lines 4-7).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to include entering at least one piece of product identifying data for at least one product into a first data entry field, entering at least one piece of manufacturing plant specific data into a second data entry field and storing the product identifying data, the plant specific data and the process data together in at least one database to reduce the number of computers and operating systems required for protecting and managing plant equipment. Hence, capital costs are lowered and the traditional requirement for both expertise and human resources necessary to integrate and maintain is reduced (Spriggs: col. 1, lines 67 and col. 2, lines 1-5).

20. As per claim 13, Spriggs does not expressly teach the step of manually collecting at least one piece of product data from the at least one product and entering the data in the same at least one database that stores the product identifying data, the plant specific data and the process data.

Brandl teaches to the step of collecting at least one piece of product data from the at least one product and entering the data in the same at least one database that stores the product identifying data, the plant specific data and the process data (col. 28, lines 4-7).

Therefore, it would have been obvious to a person of ordinary skill in the

art at the time of applicant's invention to include the step of collecting at least one piece of product data from the at least one product and entering the data in the same at least one database that stores the product identifying data, the plant specific data and the process data to reduce the number of computers and operating systems required for protecting and managing plant equipment. Hence, capital costs are lowered and the traditional requirement for both expertise and human resources necessary to integrate and maintain is reduced (Spriggs: col. 1, lines 67 and col. 2, lines 1-5).

21. As per claim 14, Spriggs discloses the step of setting at least one range of specifications for the at least one piece of process data (col. 26, lines 7-11).

22. As per claim 15, Spriggs discloses the step of notifying the user in real time when the at least one piece of process data falls outside the at least one range of specifications (col. 5, lines 66-67, col. 6, lines 1-4 and col. 10, lines 1-2 and 22-26).

23. As per claim 16, Spriggs disclose the step of setting an alarm within the at least one range of specifications (col. 10, lines 1-2 and 22-26).

24. As per claim 17, Spriggs discloses the step of notifying the user in real time when the at least one piece of process data triggers the alarm (col. 5, lines 66-67 and col. 6, lines 1-4).

25. As per claim 18, Spriggs discloses the step of generating at least one report from the at least one piece of data (col. 28, lines 4-6).

Spriggs does not expressly teach to at least one piece of product identifying data, the at least one piece of plant specific data, the at least one piece of process data, and the at least one piece of product data stored in the same at least one database.

Brandl teaches to at least one piece of product identifying data, the at least one piece of plant specific data, the at least one piece of process data, and the at least one piece of product data stored in the same at least one database (col. 28, lines 4-7).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to include at least one piece of plant specific data, the at least one piece of process data, and the at least one piece of product data stored in the same at least one database to reduce the number of computers and operating systems required for protecting and managing plant equipment. Hence, capital costs are lowered and the traditional requirement for both expertise and human resources necessary to integrate and maintain is reduced (Spriggs: col. 1, lines 67 and col. 2, lines 1-5).

26. As per claim 19, Spriggs discloses the step of allowing at least one user to access the at least one database in order to track data through each step of the at least one manufacturing sub-process (col. 2, lines 44-48).

27. As per claim 20, Spriggs discloses (a) providing at least one piece of manufacturing equipment capable of producing at least one product (col. 2, lines 12-17; it is inherent that a plant produces some product which includes services or tangible item), (b) collecting automatically at least one piece of process data from the at least one piece of manufacturing equipment (col. 2, lines 44-48) and entering manually at least one piece of data produced from the manufacturing equipment (col. 2, lines 44-48, col. 5, lines 66-67, col. 6, lines 1-4 and 11-13, col. 21, lines 41-46 and 64-67).

Spriggs does not expressly teach entering manually at least one piece of product data for the at least one product produced from the manufacturing equipment and storing the at least one piece of process data and at least one piece of product data together in the same at least one database.

Brandl teaches to (c) collecting at least one piece of product data for the at least one product produced from the manufacturing equipment (col. 28, lines 4-7) and (d) storing the at least one piece of process data and at least one piece of product data together in the same at least one database (col. 28, lines 4-7).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to include entering manually at least one piece of product data for the at least one product produced from the manufacturing equipment, and storing the at least one piece of process data and at least one piece of product data together in the same at least one database to reduce the number of computers and operating systems required for protecting and managing plant equipment. Hence, capital costs are lowered and the traditional requirement for both expertise and human resources necessary to integrate and maintain is reduced (Spriggs: col. 1, lines 67 and col. 2, lines 1-5).

28. As per claim 21, Spriggs discloses the step of setting at least one range of specifications for the at least one piece of process data (col. 26, lines 7-11).

29. As per claim 22, Spriggs discloses the step of notifying the user in real time when the at least one piece of process data falls outside the at least one range of specifications (col. 5, lines 66-67, col. 6, lines 1-4 and col. 10, lines 1-2 and 22-26).

30. As per claim 23, Spriggs discloses the step of setting an alarm within the at least one range of specifications (col. 10, lines 1-2 and 22-26).

31. As per claim 24, Spriggs discloses the step of notifying the user in real time when the at least one piece of process data triggers the alarm (col. 5, lines 66-67 and col. 6, lines 1-4).

32. As per claim 25, Spriggs discloses the step of generating at least one report (col. 28, lines 4-7).

Spriggs does not expressly teach to the process data and product data stored in the at least one database (col. 28, lines 4-6).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to include the process data and product data stored in the at least one database to reduce the number of computers and operating systems required for protecting and managing plant equipment. Hence, capital costs are lowered and the traditional requirement for both expertise and human resources necessary to integrate and maintain is reduced (Spriggs: col. 1, lines 67 and col. 2, lines 1-5).

33. As per claim 27, Spriggs discloses a means for setting a range of specifications for the process data (col. 26, lines 7-11).

Spriggs does not expressly teach to setting a range of specifications product

data.

Brandl teaches to setting a range of specifications product data (col. 49, lines 12-17).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to include setting a range of specifications product data to allow the user to configure properties for each piece of equipment (Spriggs: col. 26, lines 7-8).

34. As per claim 28, Spriggs discloses a means for notifying the user in real time when the process data falls outside the range of specifications (col. 5, lines 66-67, col. 6, lines 1-4 and col. 10, lines 1-2 and 22-26).

Spriggs does not expressly teach a means for notifying the user in real time when the product data falls outside the range of specifications.

Brandl teaches to a means for notifying the user when the product data falls outside the range of specifications (col. 51, lines 14-16).

Therefore, it would have been obvious to a person of ordinary skill in the

art at the time of applicant's invention to include to a means for notifying the user when the product data falls outside the range of specifications to provide a means for the to drive user-defined corrective actions (Spriggs: col. 11, lines 13-14).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to a plant management system:

U.S. Patent No.: 6,268,853 discloses a development tool for use in specifying a sub-set of information required to generate control tools for an industrial process.

U.S. Patent No.: 6,829,512 discloses a system and method for creating a controlling device.

U.S. Patent No.: 6,477,435 discloses industrial controllers for controlling industrial processes and manufacturing equipment.

U.S. Patent No.: 6,151,023 discloses an apparatus for displaying management information regarding hardware and software components in a computer system.

U.S. Patent Publication No.: 2004/0093113 discloses an automated industrial plant asset management system including a unified display environment and a common database structure for protecting and managing industrial plant assets including a multifarious grouping of machinery and processes.

U.S. Patent Publication No.: 2005/0015158 discloses a data acquisition system and method for process control in which data can be automatically acquired.

U.S. Patent Publication No. 2002/0120921 discloses a method, apparatus and data construct set for generating simulation data structures which can be used by a modeling system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Norton whose telephone number is 571-272-3694. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Knight
Supervisory Patent Examiner
Art Unit 2121